

## ANONYMOUS ACQUISITION OF DIGITAL PRODUCTS BASED ON SECRET SPLITTING

### ABSTRACT OF THE DISCLOSURE

5       An entity acquiring a digital product from a provider supplies acquisition-  
related data such as an entity identification as well as information identifying a  
provider of the product and, if applicable, a price of the product to an anonymity  
service. In turn, the anonymity service splits each of these pieces of information into  
a plurality of secret shares that are thereafter provided to corresponding sets of  
10   shareholders. The anonymity service retains a transaction identification and identities  
of the shareholders, but does not store or otherwise retain the secrets, i.e., the  
acquisition-related data. When needed, the anonymity service reconstructs the secrets  
by requesting the secret shares from the shareholders such that it can anonymously  
fulfill the acquisition of the product. If later required, the anonymity service may  
15   reconstruct the secrets for the purposes of auditing, legal investigations or the like. In  
this manner, retraceable anonymous electronic transactions are made possible.

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